

REMARKS/ARGUMENTS

The non-final Office Action of August 7, 2008, has been carefully reviewed and these remarks are responsive thereto. The Office Action does not mention currently pending claims 35-41. Claims 35-38 were added in the Response mailed April 17, 2007. The indicated allowability of claims 6, 19 and 32 as set forth in the Office Action mailed July 5, 2007, was withdrawn in view of newly discovered reference to Magret et al. (U.S. Patent No. 6,988,146). Claims 39-41 were added in the Response mailed January 31, 2008. As noted in the Response mailed January 31, 2008, claims 39, 40, and 41 correspond to previously cancelled claims 6, 19 and 32. Claims 1-5, 6-10, 12-18, 20-25, 27-31, and 33-41 are currently pending.

Claim Rejections Under 35 U.S.C. §103(a)

In the non-final Office Action mailed August 7, 2008, claims 1-4, 9-11, 29 and 34 were rejected under 35 U.S.C. 103(a), as being unpatentable over Willars et al. (2003/0013443 A1) in view of Yukie (2003/0036392 A1).

Claims 5 and 31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Willars in view of Yukie in further view of Chambert (U.S. Patent No. 5,499,387).

Claims 7, 8, 30 and 33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Willars in view of Yukie in further view of Kennedy, III et al (U.S. Patent No. 5,966,658)

Claims 12 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Willars in view of Yukie in further view of Igarashi (U.S. Patent Pub. No. 2001/0053694 A1).

Claims 14-17, 22-26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Willars in view of Yukie in further view of Funato (U.S. Patent Pub. No. 2003/0087646 A1).

Claim 18 was rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Willars, Yukie and Funato in further view of Chambert.

Claims 20 and 21 were rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Willars, Yukie and Funato in view of Kennedy.

Claims 27 and 28 were rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Willars, Yukie and Funato in further view of Igarashi.

Independent claim 1 claims:

1. A method comprising:
 - receiving from a first access router in a first network by a second access router in a second network that serves a different service area a request for authorization inquiry including an identifier that identifies a mobile terminal that is a candidate for a handoff operation;
 - causing a database to be queried via a server to determine whether the second access router is authorized to accept a handoff operation for the mobile terminal;
 - in response to determining that the mobile terminal is authorized to be handed off to the second access router, performing a handoff operation from the first access router to the second access router; and
 - in response to determining that the mobile terminal is not authorized to be handed off to the second access router, inhibiting the handoff operation from the first access router to the second access router.

As recognized in the Office Action mailed August 7, 2008, (at p. 3), Willars fails to clearly teach “a first and second access router of two different networks.”

The Office Action mailed August 7, 2008, states that Willars discloses a Serving Network, which reads on a first network, and that a Drift Network, which reads on a second network. Contrary to this assertion, Willars makes no mention of a Serving Network or a Drift Network, but rather discusses a Drift *Controller* and a Serving *Controller*. In fact, Willars teaches a single radio access network 14 having one or more radio network controllers (SRNC & DRNC). Page 4, ¶ 48; *see also* FIG. 1A. The multiple network controllers may help control radio resources and radio connectivity (p. 1, ¶ 6), but do not suggest or imply the existence of other networks, as asserted by the Office Action on pp. 2-3. That is, Willars only uses a single network. As such, Willars fails to teach or suggest a method of handing off a mobile terminal from a first network served by a first access device to a second network served by a second access device. Willars does not teach or suggest “receiving from a first access router in a first network by a second access router in a second network that serves a different service area a request for authorization inquiry including an identifier that identifies a mobile terminal that is a

candidate for a handoff operation” or “causing a database to be queried via a server to determine whether the second access router is authorized to accept a handoff operation for the mobile terminal.” Willars does not even mention the word, “server,” let alone a method that comprises “causing a database to be queried via a server ...” as claimed in claim 1.

Other cited art, such as Yukie, do not remedy the deficiencies in Willars. While Yukie discloses a packet switched network for data interconnected by a network gateway to a circuit switched network, there is no teaching in Yukie of how to make a handoff from a first access router to a second access router as claimed in pending claim 1. Indeed, the Office Action does not identify any alleged first access router or second access router in Yukie as claimed in claim 1. Nor does the Office Action identify any disclosure in Yukie of “receiving from a first access router in a first network by a second access router in a second network that serves a different service area a request for authorization inquiry including an identifier that identifies a mobile terminal that is a candidate for a handoff operation” or “causing a database to be queried via a server to determine whether the second access router is authorized to accept a handoff operation for the mobile terminal.”

There is no teaching in Yukie of a handover decision from a first access router to a second access router independently of whether the mobile terminal is authorized to roam into the network of the new access router. Indeed, Yukie teaches that “[t]erminal 205 selects which network to use according to selection criteria, such as data rate, cost, energy consumption, or a combination of criteria.” Yukie, paragraph [0030].

Thus, even if the proposed combination of Willars and Yukie was proper, which it is not for at least the reasons noted below, the proposed combination does not result in the invention of claim 1.

The present invention provides methods and apparatus for pre-authorizing handovers among access routers in communication networks. The present invention solves the problems (such as wasted resources and frequency spectrum, and delayed handover processing) encountered in prior methods wherein a mobile terminal is handed over to a new access router, and then an authorization process ensues to determine whether the mobile terminal is authorized

to roam into a new network. See paragraphs 11-15 of the specification of the present application as originally filed.

The proposed combination of Willars and Yukie is not proper. As noted above, Willars teaches a single network. The Office Action does not provide any reason why it would have been obvious to one of ordinary skill in the art at the time of the present invention to modify Willars to include a second network as taught in Yukie, and then to further modify the proposed combination to provide “receiving from a first access router in a first network by a second access router in a second network that serves a different service area a request for authorization inquiry including an identifier that identifies a mobile terminal that is a candidate for a handoff operation” or “causing a database to be queried via a server to determine whether the second access router is authorized to accept a handoff operation for the mobile terminal” as claimed in claim 1.

There is also no suggestion to combine the teachings of Willars with Yukie and modify them in a manner that results in claim 1, except using Applicant's invention as a template through a hindsight reconstruction of Applicant's claims. Such hindsight reconstruction is improper under *KSR Int'l v. Teleflex, Inc.*, 127 S. Ct. 1727, 82 U.S.P.Q.2d 1385 (2007). Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead there must be some articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness. *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (cited with approval in *KSR*).

The dependent claims depending from base claim 1 are patentable over a proposed combination of Willars and Yukie for at least same reasons that claim 1 is patentable and for the additional features recited therein. The other cited references do not remedy the deficiencies in a proposed combination of Willars and Yukie.

Independent claims 14 and 29 have similar features as claim 1. The dependent claims depending from base claim 14 or 29 are patentable over a proposed combination of Willars in view of Yukie, or the proposed combination of Willars in view of Yukie and further in view of Funato for at least same reasons that claim 1 is patentable and for the additional features recited

therein. The other cited references do not remedy the deficiencies in a proposed combination of Willars in view of Yukie, or Willars in view of Yukie and further in view of Funato.

While Funato discloses forwarding of data between networks, Funato is silent as to a method comprising “receiving from a first access router in a first network by a second access router in a second network that serves a different service area a request for authorization inquiry including an identifier that identifies a mobile terminal that is a candidate for a handoff operation” or “causing a database to be queried via a server to determine whether the second access router is authorized to accept a handoff operation for the mobile terminal.”

The Office Action asserts with respect to the rejection of claims 14-17, and 22-26 that it would have been obvious to a person of ordinary skill in the art to modify the teachings of Willars in view of Yukie in further view of Funato in order to transfer the functionality of mediating a handover processing to the access router which in turn optimizes the system by preventing use to (sic, of) radio resources for handoffs. There is, however, nothing in Willars, Yukie or Funato that indicates that one of ordinary skill in the art would have recognized such a proposed combination or the benefits thereof. The Office Action fails to provide articulated reasoning and rationale underpinning to support the legal conclusion of obviousness. Such a rejection cannot be sustained.

CONCLUSION

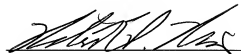
All rejections having been addressed, Applicants respectfully submit that the instant application is in condition for allowance, and respectfully requests prompt notification of the same. If there are any questions, the examiner is invited to contact Applicants' undersigned representative at the number noted below.

Appln. No.: 09/986,778
Response dated September 12, 2008
Reply to Office Action of August 7, 2008

Respectfully submitted,
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Dated: September 12, 2008

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